Serial No. 10/542,570

Atty. Doc. No. 2003P00655WOUS

## Amendments to the Claims:

The text of all pending claims, (including withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with <u>strikethrough</u>. The status of each claim is indicated with one of (original), (currently amended), (canceled), (withdrawn), (new), (previously presented), or (not entered).

Applicant reserves the right to pursue any canceled claims at a later date.

The following listing of claims will replace all prior versions, and listings, of claims in the application:

## 1. - 4. (canceled)

5. (previously presented) A device for diagnosing obstructions in channels of a micro heat exchanger, comprising:

at least one temperature sensor arranged on an outside of the micro heat exchanger; and an evaluation unit connected to the at least one temperature sensor, wherein

the evaluation unit diagnoses an obstruction on the basis of changes of a measured temperature, wherein

entry parameters of fluids involved in the heat exchange are unchanged.

- 6. (previously presented) The device according claim 5, wherein the device is a detachable arrangement.
- 7. (previously presented) The device according claim 5, wherein the outside is an outer surface of the micro heat exchanger.
- 8. (currently amended) A<u>The</u> device for diagnosing obstructions in channels of a micro heat exchanger according to claim 5, further comprising:

at least one temperature sensor arranged on an outside of the micro heat exchanger; and a closed-loop control device connected to the at least one temperature sensor, wherein

Serial No. 10/542,570

Atty. Doc. No. 2003P00655WOUS

the closed-loop control device regulates a mass flow of fluids involved in the heat exchange in the sense of keeping the measured temperature constant, and wherein

the closed-loop control device diagnoses an obstruction on the basis of changes in the mass flow.

- 9. (canceled)
- 10. (canceled)
- 11. (previously presented) A method for diagnosing obstructions in channels of a micro heat exchanger, comprising:

measuring a temperature of the micro heat exchanger at an outside of the micro heat exchanger; and

diagnosing an obstruction on the basis of changes of the measured temperature, wherein entry parameters of the fluids involved in the exchange of heat remain unchanged.

- 12. (previously presented) The method according claim 11, wherein the measuring of the temperature is accomplished at at least one point on the outside of the micro heat exchanger.
- 13. (previously presented) The method according claim 11, wherein the outside is an outer surface of the micro heat exchanger.
- 14. (currently amended) A<u>The</u> method for diagnosing obstructions in channels of a micro heat exchange according to claim 11, further comprising:

measuring a temperature of the micro heat exchanger at an outside of the micro heat exchanger;

regulating a mass flow of one of the fluids involved in the heat exchange such that the measured temperature is constant; and

diagnosing an obstruction on the basis of changes of the mass flow.

15. (canceled)

Serial No. 10/542,570

Atty. Doc. No. 2003P00655WOUS

16. (previously presented) The method according claim 14, wherein more than one mass flows are regulated.

17. (canceled)